

REMARKS

Claims 1-19 were pending in the present patent application. Claims 1-19 stand rejected. By this amendment, claim 20 has been added. This application now includes claims 1-20.

The Examiner rejected claims 1-19 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 2,911,815 (Crepinsek). Applicants respectfully request reconsideration of the rejection of claims 1-19 in view of the following.

Claim 1 is directed to a lockset, and recites, “a lock mechanism having an aperture; an operator; and a turn-button mounted in said operator, said turn-button including: a head portion; and a shaft extending from said head portion, said shaft having a leading helical end portion that engages said aperture of said lock mechanism.”

In rejecting claim 1, the Examiner relies on the Crepinsek locking member 39 as corresponding to the recited “actuator” of a locking mechanism 1, the inclined end area 40 (characterized by the Examiner as a “cut out” as corresponding to the recited “aperture” of the lock mechanism, outer-handle piece 38 as corresponding to the recited “turn-button”, with an element 220 corresponding to the “head portion”, element 230 as corresponding to the recited “shaft”, and the anterior end of rotatable-driving means 36 as corresponding to the recited “leading helical portion”. Applicants respectfully disagree.

Applicants have searched the entirety of Crepinsek and found no reference to elements 220 and 230. Clarification is respectfully requested.

Crepinsek discloses in Figs. 1, 2, and 3 a rotatable driving means 36 formed as a member having a cylindrical outer surface and having an inclined area 37. The inclined area 37 of rotatable driving means 36 is positioned to axially face inclined area 40 of locking

member 39. When rotatable driving means 36 is rotated, the inclined area 37 of rotatable driving means 36 engages the inclined area 40 of locking member 39 to move locking member 39 linearly, e.g., to the right as shown in Fig. 3 with respect to Fig. 1. Further, as shown in Figs. 1-3, the inclined area 37 of rotatable driving means 36 defines a single continuous engagement surface located on the distal end of rotatable driving means 36. (See also Crepinsek, column 3, lines, 36-69).

Claim 1 recites, the “shaft having a leading helical end portion that engages said aperture of said lock mechanism.” As shown in the progression from the unlocked position to the locked position of Figs. 1 and 3 of Crepinsek, rotatable driving means 36 engages locking member 39 by surface contact between inclined areas 37 and 40. However, as shown in Fig. 1, in the unlocked position there is a gap, i.e., no engagement, between inclined area 37 of rotatable driving means 36 and inclined area 40 of locking member 39, and Fig. 2 of Crepinsek is a vertical view of Fig. 1 (see Crepinsek column 1, lines 51-55). Thus, Figs. 1 and 2 of Crepinsek do not depict any engagement, but rather engagement occurs during the transition to the locked position depicted in Fig. 3.

However, Figs. 1-3 of Crepinsek show that that incline area 40 slopes to an outer perimeter of locking member 39, and these side views of locking member 39 do not depict incline area 40 as an aperture, i.e., a hole, but rather as is clearly shown in Figs. 1 and 3, show that inclined area 40 forms a diagonal slope that terminates at the outer perimeter of locking member 39. Accordingly, incline area 40 of locking member 39 does not form an aperture, and there simply is no engagement of rotatable driving means 36 with an *aperture* of locking member 39.

Further, rotatable driving means 36 of outer-handle piece 38 does not include a shaft having a leading helical end portion. The common meaning of the term “helical” is spiraling, or something spiral in form (see Merriam-Webster On-line at www.m-w.com/dictionary.htm).

The inclined area 37 of the driving means 36 of outer-handle piece 38 does not have a spiral structure, but rather, defines an inclined ramped surface as a diagonal slope as is clearly shown in Figs. 1 and 3. Fig. 2 merely shows a vertical view with driving means 36 extending over incline area 40 of locking member 39, and the curve shown in Fig. 2 is a result of the diagonal slope of inclined area 37 intersecting the cylindrical perimeter of the driving means 36. As shown in Figs. 1 and 3, inclined area 37 defines a single continuous inclining/declining engagement surface that extends across the cross-section of driving means 36, and thus is not spiraling. Accordingly, Crepinsek does not disclose, teach or suggest a shaft having a leading helical end portion, as recited in claim 1.

In view of the above, Applicants respectfully submit that Crepinsek does not disclose, teach or suggest the subject matter of claim 1. Therefore, claim 1 is believed allowable in its present form.

Claims 2, 3, 8, and 11-14 are believed allowable due to their dependence from allowable base claim 1. In addition, claims 2, 3, 8, and 11-14 further patentably define the invention over the cited reference.

For example, claim 2 recites, in part, “said leading helical end portion having a plurality of leading helical surfaces that taper and twist from a transition line of said shaft toward a tip end of said shaft.”

However, as is clearly shown in Figs. 1 and 3 of Crepinsek, the inclined area 37 of the driving means 36 of outer-handle piece 38 defines a single continuous inclining/declining

diagonal engagement surface that extends across the cross-section of driving means 36.

Accordingly, Crepinsek does not disclose a structure having a plurality of leading helical surfaces, as recited in claim 2.

Further, in Crepinsek the inclined area 37 does not taper and twist from a transition line of the shaft, as recited in claim 2. As would be understood by one skilled in the art in viewing Figs. 1-3 of Crepinsek, rotatable driving means 36 is a member having a cylindrical outer shape and having a diagonal cut forming inclined area 37. Thus, rotatable driving means 36 of Crepinsek does not taper and twist from a transition line toward a tip end.

In view of the above, Applicants respectfully submit that Crepinsek does not disclose, teach or suggest the subject matter of claim 2. Therefore, claim 2 is believed allowable in its own right.

Claim 3 depends from claim 2, and is believed allowable in view of its dependence on an otherwise allowable base claim 1 and/or claim 2.

Claim 8 recites, “The lockset of claim 1, said lock mechanism including a rotatable actuator having said aperture, wherein once said leading helical end portion engages said aperture, a rotation of said turn-button effects a corresponding rotation of said rotatable actuator of said lock mechanism.” As is shown in the progression from an unlocked position to a locked position of Figs. 1 and 3 of Crepinsek, a rotation of rotatable driving means 36 results in a linear displacement of locking member 39, and thus, does not effect a corresponding rotation of locking member 39 having the asserted aperture 40.

Accordingly, claim 8 is believed allowable in its own right.

Claim 11 depends from claim 1, and is believed allowable in view of its dependence from claim 1.

Claim 12 recites, “The lockset of claim 1, wherein a rotation of said turn-button effects a corresponding rotation of said aperture of said lock mechanism.” As is shown in the progression from an unlocked position to a locked position of Figs. 1 and 3 of Crepinsek, a rotation of rotatable driving means 36 results in a linear displacement of locking member 39, and thus, does not effect a corresponding rotation of the asserted aperture 40 of locking member 39.

Accordingly, claim 12 is believed allowable in its own right.

Claim 13 recites, “The lockset of claim 1, wherein said aperture of said lock mechanism has a substantially rectangular shape.” (Emphasis added). That which the Examiner asserts as being an aperture in Crepinsek with respect to claim 1, i.e., “cut out 40 that receives element 36”, clearly is not a substantially rectangular shape, as shown in Figs. 1-3 of Crepinsek. The further assertion by the Examiner that the “lock bolt has a cross-sectional shape that is substantially rectangular, figure 1” is relevant, as the rectangular shape in claim 13 relates to the aperture, not the cross-sectional shape of the lock bolt.

Accordingly, claim 13 is believed allowable in its own right.

Claim 14 recites, “The lockset of claim 2, wherein a number of said plurality of leading helical surfaces is greater than two.” (Emphasis added). The Examiner considers there to be four helical surfaces in the rotatable driving means 36 of Crepinsek, one on each side of the button, and one connecting each of the top and the bottom. However, as is clearly shown in Figs. 1 and 3 of Crepinsek, the inclined area 37 of the driving means 36 defines a single (i.e., one) continuous inclining/declining diagonal engagement surface that extends across the cross-section of driving means 36. Accordingly, Crepinsek does not disclose a structure wherein a number of the plurality of leading helical surfaces is greater than two.

Accordingly, claim 14 is believed allowable in its own right.

Independent claim 4 recites, “A turn-button for a lockset, comprising: a head portion; and a shaft extending from said head portion, said shaft having a leading helical end tip.” Crepinsek does not disclose a turn-button for a lockset, having a head portion and a shaft extending from said head portion, the shaft having a leading helical end tip, for reason set forth above with respect to claims 1 and 2.

In view of the above, Applicants respectfully submit that Crepinsek does not disclose, teach or suggest the subject matter of claim 4. Therefore, claim 4 is believed allowable in its present form.

Claims 5, 6, 15 and 16 depend, directly or indirectly, from claim 4, and are believed to be allowable in view of their dependence from otherwise allowable base claim 4. In addition, claim 6 is believed to be allowable in view of its dependence from otherwise allowable intervening claim 5. Further, claims 5 and 6 are believed allowable in their own right for substantially the same reasons set forth above with respect to claims 2 and 3, respectively.

Claim 15 recites, “The lockset of claim 4, wherein a perimeter of an elongate portion of said shaft has a substantially rectangular shape. Nothing in Crepinsek discloses or suggests that a perimeter of rotatable driving means 36 has a substantially rectangular shape. Rather, as would be understood by one skilled in the art in viewing Figs. 1-3 of Crepinsek, driving means 36 is a member having a cylindrical outer shape and having a diagonal cut forming inclined area 37.

Accordingly, claim 15 is believed allowable in its own right.

Claim 16 recites, “The lockset of claim 5, wherein a number of said plurality of leading helical surfaces is greater than two.” (Emphasis added). The Examiner considers there to be four helical surfaces in the rotatable driving means 36 of Crepinsek, one on each side of the button, and one connecting each of the top and the bottom. However, as is clearly shown in Figs. 1 and 3 of Crepinsek, the inclined area 37 of the driving means 36 of defines a single (i.e., one)

continuous inclining/declining diagonal engagement surface that extends across the cross-section of driving means 36. Accordingly, Crepinsek does not disclose a structure wherein a number of the plurality of leading helical surfaces is greater than two.

Accordingly, claim 16 is believed allowable in its own right.

Independent claim 7 recites, “A lockset comprising: a lock mechanism including an actuator having an aperture; an operator; a turn-button mounted in said operator, said turn-button including a shaft; and means for facilitating self-alignment of said shaft of said turn-button with said aperture of said lock mechanism as said shaft of said turn-button is inserted into said aperture of said lock mechanism.”

Applicants submit that Crepinsek does not disclose, teach or suggest a turn-button lock mechanism having an aperture as recited in claim 7 for substantially the same reasons set forth above with respect to claim 1. Therefore, claim 7 is believed allowable in its present form.

Claims 9, 10, 17, 18, and 19 depend, directly or indirectly, from independent claim 7. Claims 9, 10, 17, 18, and 19 are believed allowable in view of their dependence from claim 7.

In addition, claims 9 and 10 correspond generally to claims 2 and 3, respectively, and are believed allowable in their own right for substantially the same reasons set forth above with respect to claims 2 and 3. Also, claim 10 is believed allowable in view of its dependence from otherwise allowable intervening claim 9.

Claim 17 depends from claim 7, and is believed allowable in view of its dependence on otherwise allowable base claim 7.

Claim 18 recites, “The lockset of claim 7, wherein said aperture of said lock mechanism has a substantially rectangular shape.” That which the Examiner asserts as being an aperture in Crepinsek with respect to claim 1, i.e., “cut out 40 that receives element 36”, clearly is not a substantially rectangular shape, as shown in Figs. 1-3 of Crepinsek. The further assertion by the 5801-03/B&D0003.US

Examiner that the “lock bolt has a cross-sectional shape that is substantially rectangular, figure 1” is relevant, as the rectangular shape in claim 18 relates to the aperture, not the cross-sectional shape of the lock bolt.

Accordingly, claim 18 is believed allowable in its own right.

Claim 19 recites, “The lockset of claim 9, wherein a number of said plurality of leading helical surfaces is greater than two.” (Emphasis added). The Examiner considers there to be four helical surfaces in the rotatable driving means 36 of Crepinsek, one on each side of the button, and one connecting each of the top and the bottom. However, as is clearly shown in Figs. 1 and 3 of Crepinsek, the inclined area 37 of the driving means 36 defines a single (i.e., one) continuous inclining/declining diagonal engagement surface that extends across the cross-section of driving means 36. Accordingly, Crepinsek does not disclose a structure wherein a number of the plurality of leading helical surfaces is greater than two.

Accordingly, claim 19 is believed allowable in its own right.

New claim 20 recites, “The lockset of claim 1, wherein said leading helical end portion forms a plurality of side surfaces of said shaft.” Support for claim 20 may be found, for example, in Applicants’ Figs. 1 and 2, and in the Specification at page 3, lines 3-15. Crepinsek does not disclose, teach or suggest the subject matter of claim 20.

Accordingly, claim 20 is believed allowable in its own right, as well as due to its dependence from claim 1.

In view of the above, Applicants respectfully request that the rejection of claims 1-19 under 35 U.S.C. 102(b) be withdrawn, and request favorable consideration of new claim 20.

Applicants believe that the present application is in condition for allowance in its present form, and it is respectfully requested that the Examiner so find and issue a Notice of Allowance in due course.

In the event Applicants have overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicants hereby conditionally petition therefor and authorize that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (317) 894-0801.

Respectfully submitted,

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